



**TMA Technology, Ltd.**

## **Quality Products & Physics Services for Radiation Oncology**

### *Content:*

- 1. Radiation Oncology Performance Enhancement (ROPE) Database*
- 2. TMA Web Portal Content*
- 3. Physics Services*
- 4. Pricing and Contact Information*



# “ROPE” Database

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The Radiation Oncology Performance Enhancement Database (ROPE) and our Web Portal, [www.TMATech.com](http://www.TMATech.com), work hand-in-hand to provide an innovative way to gather and report vital information necessary to obtain the goals of accreditation, reach maximum clinical efficiency and provide ultimate patient care.

## ROPE Database:

- The ROPE is an online application service provider (ASP) solution that can be accessed via any workstation, laptop or PDA with internet access. Software upgrades and backups are done remotely by TMA, therefore are effortless to onsite staff. This setup increases both flexibility and efficiency in the clinic.
- The ROPE provides a comprehensive patient QA section that requires input from all staff involved in the patient treatment process. Reports can be generated to show which tasks have been completed, which haven't and why. QA items are based on standards recommended by the ACR, ACRO, JCAHO and the community. In addition, the ROPE has implemented several ways of tracking and reporting hidden processes which could lead to operational issues.
- The ROPE can track certain aspects of staff productivity, specifically physics and dosimetry, that are not typically included in the charging statistics. Therefore, productivity statistics are more accurately accounted for and the need for additional staff can be better justified.
- The personnel section provides a way to easily record and track licensure and certification due dates, mandatory in-services and continuing education credits. A comprehensive report showing all of this information can be generated for each employee or all employees in the department, fulfilling a key requirement during the accreditation survey process.
- The equipment section of the ROPE provides several ways to meet and maintain compliance with state and federal organizations. QA for the linear accelerator, simulator and treatment planning system is based on recommendations by the AAPM Task Groups. Reports can be easily generated to document compliance.
- ACR and ACRO links are incorporated so that standards are easily accessible. Links to the TMA Web Portal provide access to policies and forms that correlate to items in the database.
- Data generated from the ROPE can be used to benchmark clinical and technical processes and can be utilized as a QA comparison analysis tool for network sites.



# TMA Web Portal

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TMA Technology has created a web portal specifically for radiation oncology professionals. Our mission is to provide a resourceful web portal with tools to assist in the day-to-day operations of the clinic. Our online content can be downloaded and customized for your facility. The content is based on the latest standards recommended by the ACR, ACRO, JCAHO and guidelines from the American Association of Physicists in Medicine (AAPM).

## **LINKS**

A pre-filtered links section, which contains over 650 links related to radiation oncology, is provided for your convenience. A few examples of some of the links are: equipment/vendors, organizations, continuing education, physics resources, protocols, publications, accreditation links, patient resources, journals, etc.

## **LATEST NEWS**

TMAT will keep you updated on the latest news in the field of radiation oncology, including vendor updates, new treatment techniques, compliance and coding issues, accreditation updates, protocol updates and much more.

## **POLICIES AND PROCEDURES**

### **CLINICAL:**

- Medical Record
- Obtaining Informed Consent
- Advanced Directives
- Patient Consultation
- Patient Education
- Acceptable Blood Levels
- Nursing Assessment
- Medication Administration
- Conscious Sedation
- Skin Integrity & Care
- Nutrition Support
- Nutrition Assessment
- Nutrition Education
- Social Services Patient Assessment
- Follow-ups
- Nursing Care Plans for:
  - Breast
  - Chest
  - Head & Neck
  - Abdomen
  - Pelvis
  - CNS

### **TECHNICAL:**

- Simulator Warm-up
- Linear Accelerator Warm-up (vendor specific)
- Observation of Patients During Radiation Tx
- Preventive Maintenance for Equipment
- Record & Verify Nonfunctional
- Chart Check
- Physics Initial and Weekly Chart Check
- Special Medical Physics Consult
- Eye Shield
- Pacemaker
- Port Film
- Tattoo
- Diode Measurement and Verification
- Constructing and Checking Custom Blocks
- Block Room Safety
- Clinical Treatment Setups
- Radiation Safety



## **POLICIES AND PROCEDURES (Cont.)**

### **ADMINISTRATIVE:**

- Operating Hours
- Abuse & Neglect
- Patient Satisfaction Survey
- Staffing Plan
- Personnel Radiation Exposure Monitoring
- Pregnant Radiation Workers
- New Employee Orientation
- Contract/Agency Employees
- Temporary Services
- Monitoring Emp Lead and Cadmium Levels

### **BRACHYTHERAPY:**

- Brachytherapy Program
- Brachytherapy Emergency
- Handling and Loading Radioactive Material
- Ordering, Receiving and Returning Rad. Materials
- Transporting Radioactive Sources and Patients
- Disposing of Radioactive Material
- Leak Testing Radioactive Materials
- Management of Sealed Radioactive Source
- Brachytherapy Written Directive & Tx Summary
- Brachytherapy Skills Checklist
- Instructions for Cesium Patients
- Cesium Discharge Instructions
- Radiation Safety Precautions and Measurements
- Radiation Source Inventory Log
- Radiation Source Management Log
- Radioactive Spill Report Form

### **SIMULATION:**

- General Simulation
- CT Simulation
- Cesium Implant Simulation
- Construction of Immobilization Devices
- Site Specific Simulation (2-D and 3-D):
  - Abdomen
  - Brain
  - Breast – 2 Field
  - Breast – Multi-field Hanging Block or Couch Kick Tech.
  - Breast – Asymmetric Jaw Technique
  - Cranio-Spinal
  - Esophagus
  - Female Pelvis
  - Head & Neck
  - Lung
  - Mantle
  - Pituitary
  - Prostate
  - Rectum
- Contouring Policy
- Site Specific Contour:
  - Head & Neck
  - SAD Breast
  - Lung/Abdomen/Pelvis
  - Coronal Brain
  - Sagittal
- General Simulation Process (handout for patient)
- Simulation Worksheets
- 3-D Simulation Worksheet



# TMA Web Portal

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## **FORMS**

### **CLINICAL:**

Assessments:  
Nursing  
Nutrition  
Social Services  
Pain  
Nursing Care Instruction Forms:  
Brain  
Breast  
Chest  
Head & Neck  
Abdomen  
Pelvis  
CNS  
Salt & Soda Rinse  
Domeboro Soak Instructions  
Skin Care  
Dental Care  
Coping with Diarrhea  
Liquid Meal Ideas  
Diets:  
Full Liquid  
Clear Liquid  
Soft Diet  
Low Residue  
Low Iodine  
Consent Forms  
Dental Consult (Physicians)  
Conscious Sedation Record  
Side Effect Forms:  
Female & Male Pelvis  
Extremities  
Skin  
TBI  
CNS

### **ADMINISTRATIVE:**

Job Descriptions and Skills Checklists:  
Medical Director  
Manager  
Radiation Therapist  
Medical Dosimetrist  
Medical Physicist  
Radiation Oncology Nurse  
Mold Room Technologist  
Clerical/Receptionist  
Employee Performance Appraisal  
New Employee Orientation Checklist

### **QUALITY MANAGEMENT:**

QA Checklists  
Weekly Physics Chart Check Log  
Special Medical Physics Report  
Electron Cutout Measurement  
TLD/Diode Measurement  
Treatment Dose Summary  
Port Film Protocol  
Tattoo Protocol  
Peer Review/Chart Audit  
Patient Satisfaction Survey  
Department Operational Improvement Plan  
Patient Bill of Rights  
Advanced Directive  
Physician Referral Documentation  
Pregnant Radiation Workers Consent  
Monitoring Emp. Lead and Cadmium Levels  
Tools for preparing for accreditation:  
JCAHO Prep Material/Checklists  
JCAHO Required Documents  
JCAHO Previous Inspections  
JCAHO Failed Standards  
JCAHO and Contract Staff  
BRC Inspection of Rad Equipment



## **SPECIAL PROGRAMS**

### **PROSTATE SEED IMPLANT:**

- Prostate Implant Program Policy
- Patient Education Policy for Prostate Implant Patients
- Volume Study Procedure
- Ordering, Calibrating, Sterilizing and Loading Seeds Policy
- Surgical Procedures for Prostate Implants
- Follow-up Policy for Prostate Seed Implant Patients
- Radioactive Seed Implant for Prostate Cancer (handout)
- Bowel Prep for Volume Study & Implant
- Prostate Implant CT Protocol
- Prostate Implant Checklist
- Radioactive Implant Card (patient to carry)

### **VASCULAR BRACHYTHERAPY:**

- Vascular Brachytherapy Program Policy
- Vascular Brachytherapy Source Management Policy
- Vascular Brachytherapy Treatment Process Policy
- Vascular Brachytherapy Checklist
- Vascular Brachytherapy Written Directive
- Patient Measurement Survey Form

### **STEREOTACTIC:**

- Stereotactic Program Policy
- Stereotactic QA and Treatment
- Information for the Stereotactic Patient (handout)

### **IMRT:**

- IMRT Program Policy
- IMRT Roles and Responsibilities Policy
- IMRT Treatment Management for:
  - Prostate
  - Head & Neck
  - Intracranial

### **NEW DEPARTMENT:**

- Department Startup List
- Sample of Department Flow
- Suggested Chart Documentation
- Resource Room Setup

(HDR currently under construction)

## **FUTURE CONTENT**

In the near future, TMAT is looking into adding educational demonstrations online via streaming video such as IMRT QA, transporting radioactive materials and patients, as well as radiation safety. Other proposed future additions are: site customization - vendor information specific for your site sent directly to you online; special program additions - Stereotactic Radiosurgery; and additional accreditation tools.



# Physics Services

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**TMA Technology (TMAT)/Radiation Oncology Services (ROS) provides advanced medical physics services specializing in the acceptance and commissioning of new or existing linear accelerators for IMRT and 3-D treatment planning data acquisition.**

- **Experience** - Together, the TMAT/ROS team have over 70 years of combined experience in radiation oncology and have provided physics services to over 77 sites within the past 5 years, including over 125 3-D treatment planning data acquisitions.
- **Vendor Relations** - TMAT/ROS has completed 3-D treatment planning beam data acquisitions for ADAC, CMS and Varian and has done clinical commissioning for all of the major linear accelerator manufacturers. Due to these previous working relationships, the problems associated with implementing equipment and technologies have already been addressed. Therefore, there is a smoother transition clinically.
- **Availability** - TMAT/ROS is dedicated to providing services when and where you need them, traveling anywhere in the continental United States. Our equipment and personnel can be on-site gathering data weekdays, after hours and on weekends.
- **Physics Equipment** - TMAT/ROS provides a full inventory of medical physics equipment to perform complete testing and commissioning of all types of linear accelerators. Therefore, no additional equipment purchases are necessary.
- **Customers and Testimonials** - TMAT/ROS is the leading consultant for Philips Radiation Oncology Systems Pinnacle3 TPS and a service provider for US Oncology, the nation's largest cancer care network.

"Our hospital sees deadlines and costs as a high priority. I have depended on TMAT/ROS to perform data collection for our ADAC TPS at two different cancer centers. Thanks to their reliability, the measurements and modeling were performed in enough time for me to finalize the required QA ahead of the expected deadline. Thanks!"

**Jeff Kurr, Medical Physicist,  
Oxford MS**

"I thank TMAT/ROS for providing an efficient, streamlined process for good beam data acquisition, modeling and transfer into the TPS. I personally have gained enormous confidence from utilizing their Physics Services and feel that I am in a position to train physicists and dosimetrists in my own facility. I have and will continue to recommend TMAT/ROS physics services to my colleagues."

**Prabakar Moudour, Medical Physicist  
Marietta OH**

"TMAT/ROS was able to schedule support for my consulting services on fairly short notice and at various locations around the country. They executed a well planned timetable to acquire all of the data and stayed onsite until they finished the job. The data set and all printed documentation were provided in a timely manner and the model was completed and available on schedule. I have personally utilized their services at multiple sites and will use them again if the need arises."

**Alexander Turner, Director Technical Services  
Ft. Worth TX**



# Pricing and Contact Information

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## Pricing:

Pricing for a one year subscription to the TMA Web Portal is \$2000 (subject to change January 2005).

Contact TMAT for pricing on the ROPE Database and Physics Services.

## Contact Us:

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## Are you on the map yet?

